water side in the Potsdam sandstone; sometimes, however, the sides were equal.

The Corresponding Secretary read the following list of letters:—

From the Albany Institute, June 7th, 1865; the Naturhistorischer Verein der preussischen Rheinlande und Westphalens, and the Mittelrheinischer geologischer Verein, Darmstadt, August 24th, 1865; the India Museum, and the Literary and Historical Society of Quebec, September 16th, 1865, acknowledging the receipt of the Society's publications; the Real Academia de Ciencias, Madrid, July 13th, and August 24th, 1865, acknowledging the same and presenting their own publications; the Naturhistorische Gesellschaft zu Hannover, July 15th, 1865; the Museo publico de Buenos Aires, the Société Imperiale de Géographie à St. Pétersbourg, the Société Linneénne de Lyon, the R. Istituto Tecnico di Palermo, August 24th, 1865, presenting their publications.

The following paper was read:

Notes upon some Odonata from the Isle of Pines. By Samuel H. Scudder.

The Isle of Pines, where the insects were obtained, which form the basis of the following notes, is, zoölogically speaking, a portion of Cuba, though differing from it, or at least from those portions of it with which it is in geographical contiguity, by very marked physical features. I believe that a few insects have been found there, which have not yet been discovered in Cuba, but probably a more careful search will bring them to light. The island is about twenty-five miles in diameter, its nearest point fifty miles distant from Cuba, (a distance broken moreover by a series of keys stretching in a northwestwardly direction) and is in the longitude and jurisdiction of Havana. The climate is milder, but much more equable than that of the contiguous parts of Cuba.

The Odonata mentioned in the following pages were obtained at Sante Fé, on May 10th and 13th, with the exception of one or two which were taken in Cuba at an earlier date, but which became mingled in my collection, so that I was not able to distinguish them; the notes have reference particularly to the colors of the living insects. I am indebted to Mr. P. R. Uhler for some valuable hints upon the generic relations of some of the species mentioned.

#### Agrion Maria nov. sp.

9 Head, light blue; the vertex, behind the front ocellus, black. enclosing a transverse, light band of irregular border, which fails to reach the border of the eyes or of the ocelli, and is constricted in the middle so as to be nearly resolved into two wedge-shaped spots in reversed positions; antennæ dusky, the anterior half of first joint and basal half of the second pale bluish; prothorax light blue, a dorsal line, a lateral stripe, and a sublateral apical spot, black; posterior edge triangularly produced, the apex rounded; thorax light blue, the dorsum with a serrated median stripe and a humeral stripe, eleft from the humerus for more than half its length, black; pleura with a narrow anterior abbreviated black stripe, thickened at the tip, not more than one-third or one-fourth the length of the pleura, approximated and parallel to the humeral stripe and sometimes connected with its posterior fork at the apex of the same; also a narrow median black stripe parallel to the others, triangularly dilated posteriorly at the base. starting from the base of the posterior wings at the anterior border and failing to reach the mesothoracic stigma, beneath which in assumed continuation of this stripe is a small black spot; wings hyaline, apical third indistinctly luteous; pterostigma small, rhomboidal, dark reddish brown; legs pale with black spines, the femora with a superior blackish-brown vitta, extended on to the anterior surface at the apex; tibiæ with an inferior fuscous vitta obsolescent towards the apex; abdomen bronze-black, segments 1-2 with a broad lateral stripe, one with a dorsal central spot, two with a median spot in the form of an (!), 3-7 with a narrow basal annulus, and a narrow lateral stripe pale light blue, that of segments 1-2 more distinct; segment eight, with a very narrow basal annulus and the inferior surface pale blue; nine, pale blue with a linear basal annulus, a narrow apical annulus expanded triangularly on the middle of the dorsum, and a dot on either side of the expansion, black; ten, pale blue above, black beneath, posterior margin entire; appendages black, very short; superior pair trigonal, laminate, channelled inferiorly and so minutely bifid at the tip, which is directed posteriorly upwards and slightly outwards, with a tuberele upon the middle superiorly; inferior pair sub-cylindrical, simple, twice as long as broad, subcultriform, obtusely carinate beneath; eleven postcubitals.

Length, 1.38 inches; alar expanse, 1.44 inches. 4 9.

During life the colors of the body are black with a metallic lustre on head and thorax as well as abdomen, and light blue, very pale on the abdominal segments, except 1-2.

It seems to be closely allied to A. exsulans Hagen.

### ? Agrion (Ischnura) cœcum Hagen.

Some of my specimens seem to agree pretty well with Hagen's description of this species, but yet differ so much that I deem it best

to describe them throughout.

The colors of the ? in life were not noted by me; those of the & were a bronze-green with metallic reflections, and a deep bluish purple; in the teneral stage the green was dull, and the purple very pale; in the following description I give the colors as they now appear.

Head black, the front brownish-black, labrum dark testaceous (adult 3), or luteous with a vertical transverse band of bronze-green extending forward to the base of the antennæ, and in the middle of which the ocelli are situated (teneral); antennæ blackish-brown, basal joint reddish-brown (adult 3), or luteous (teneral), joints two and three tipped with reddish-brown (3) or two luteous, three fuscous, basal half luteous (teneral ?); dorsum of prothorax bronze-green, sides bluish purple (adult &), or sides pale purplish (teneral &), or pale testaceous (teneral?); posterior edge uniformly raised (8), or entire and simple (?); thorax deep bluish purple (adult &), or pale purplish-brown (teneral 3), or pale testaceous (teneral 2), with a broad straight median dorsal stripe, a broad straight humeral stripe, largely clubbed at the apex, and a narrow metathoracic, sometimes abbreviated, stripe, bronze-green, the humeral stripe in teneral ? only dark testaceous; wings hyaline; pterostigma small, rhomboidal, rosybrown (adult 8) or pale (teneral); legs blackish-fuscous with black spines, those of tibiæ very long, the coxæ, the femora at base, their posterior and inferior surfaces, and tibiæ except anterior surface, reddish-brown, claws reddish, black-tipped (adult 3), or pale, the anterior edge of superior surface of femora and tibiæ and a basal annulus on the tarsi blackish-fuscous (teneral); abdominal segments 1-3 bright blue, the base of 1, sides of 2 and a dorsal transverse band just beyond the middle of the segment, its posterior edge excised, apical fourth of 3 bronze-green, 4-7 and 10 bronze-green, 8-9 bright blue (&, in the teneral ? the blue is faint), or, bronze greenish-brown, deepest on segments 1-2, 7-9, the sides wholly, and on segments 3-7 a basal annulus pale testaceous (teneral 9, of which the terminal segment is destroyed); posterior edge of 10 in & strongly excised; superior appendages of & black, forcipated, as long as the side of the terminal segment, sub-incurved, interiorly subunquiculated at tip, a tooth which is sometimes indistinctly bifid on the interior edge at onethird the distance from the tip, basal half suddenly produced at the inferior inner angle to a broad rounded testaceous lamina; inferior appendages luteous, very short, broad, the outer upper angle furnished with a sharp, subincurved and sharply upturned, black-tipped unguic-

ulus; appendages of eighth segment of  $\mathfrak P$  broadly ensiform, minutely denticulate beneath, superior half pale testaceous, inferior half blackish fuscous, with apical acicular divaricating appendages nearly .01 inch in length; 9-11 postcubitals.

Length, 1.25 inches; alar expanse, 1.26-1.48 inches (3), 1.20

inches (?). 3 &, 2 teneral &, 1 teneral ?.

#### Æschna virens Ramb.

I have two males from the Isle of Pines, which apparently belong to this species as described by Hagen; all the green markings of variable brilliancy in the dried insect were of a similarly bright grass-green in the living insect, and all the darker markings, except the fuscous sutures of the thoracic pleura were black. The inferior abdominal appendage appears to differ from Hagen's description in being more than half as long as the upper, and in being docked at the tip; the auricles of the second abdominal segment are smaller than usual, and there is a mass of nigro-cinereous, delicate, close pile on the dorsum of the first and second abdominal segments, in the latter only at the base; the posterior half of the wings are very slightly washed with fuscous; antecubitals 18–21; postcubitals 11–12.

Length 2.90-3.16 inches; alar expanse 4.15-4.44 inches; ptero-

stigma, .20 inches. 2 3.

#### Macromia cubensis nov. sp.

Vertex and front above purplish (in life steel-blue) with metallic reflections; front dull yellowish-brown (as in life); labrum reddishbrown, edged with black (as in life); dorsum of thorax purplish (steelblue with greenish reflections, more or less dulled in life); pleura fuscous (in life brownish-yellow) with three dull-purplish stripes (metallic blue in life), the middle one narrower and shorter than the others; legs black, next the base within, especially in the hind pair, yellowish; wings hyaline, the posterior pair fulvous at the extreme base; pterostigma greyish-fuscous; membranule nigro-cinereous; abdomen bronzegreen with metallic reflections (as in life) with a band along the sides, broader next the base, linear beyond the fourth segment, but extending the whole length of the abdomen, fuscous (in life brownish-yellow); appendage black, very short; vulvar lamina triangularly produced, excised at the apex, so as to make it bifid, the segment following it carinated; tip of abdomen furnished with short einereous hairs; antecubitals 8; postcubitals 6-7; two discoidal areolets.

Length 1.44 inches; alar expanse 2.44-2.48 inches; pterostigma

.10 inch. 3 ♀.

### Tramea insularis Hagen.

I have taken but a single female of this species, which, though Hagen refers to no such distinction, differs from four males taken by me in having the front above of the same color as the rest of the face, and the vertex a darker tinge of the same color instead of being brassy purple; also in that the fuscous band at the base of the posterior wings is narrower and reaches neither the posterior border, nor the anal angle toward which it turns.

This ? when alive had the front and vertex light brownish yellow, the labrum, except the black apex, as well as the other mouth-parts, reddish-brown; thorax very pale olivaceous-green; spots on the last three segments of abdomen black, the dorsum of the segment anterior to them dull orange; the other segments above reddish-orange; sides of abdomen dull olivaceous-green, beneath plumbeous.

I do not think this can be the  $\mathcal{L}$  of T. abdominalis; the pterostigma is fulvous; the specimens were all taken at the same time, and the  $\mathcal{L}$  are unmistakably T. insularis. Selvs seems to have had speci-

mens of both before him in preparing his description.

I do not find that Hagen makes any reference in his Synopsis to the species referred to by Selys under the name of *L. cophysa* Kollar MS., which belongs to this group, has been found in Cuba, and appears never to have been described: is it this species?

Antecubitals, 11; postcubitals, 8-9. Length, 1.84 inches; alar ex-

panse, 3.32 inches; pterostigma, .11 inch.

# Libellula auripennis Burm.

I have several specimens from the Isle of Pines which agree with Hagen's description of this species; the wings, however, can hardly be said to have their anterior margin flavescent, as the flavescence is almost entirely confined to the two principal veins at this point, slightly suffusing the membrane at the nodus and towards the base; the slight infuscation of the apex is a little flavescent also.

During life the natural colors of the teneral stage ( $\delta$  and  $\theta$ ) are as follows: The face is pale brownish-yellow, dorsum of thorax yellowish-brown (I made no note of the median sulcus); pleura the same as the face with a tinge of green, the abbreviated stripe yellowish-brown; abdomen dusky lemon-yellow, the median stripe black posteriorly, brown anteriorly; beneath the same as the pleura.

Antecubitals, 15-17; postcubitals, 11-13. Alar expanse, 2.92-3.10

inches. 53, 12. It was one of the most common species.

#### Libellula angustipennis Ramb.

One teneral female taken by me seems to agree with the descriptions by Selys and Hagen, although my specimen is somewhat smaller.

When living, this teneral \$\foats\$ showed the vertex of the head next the eyes very dark reddish-brown; the rest of the vertex and the upper part of the face steel-blue with metallic reflections, below lemon-yellow; the dorsum of the thorax dark yellowish-brown, the pleura steel-blue, both with some metallic reflections, and their stripes (which on the dorsum are a median and humeral line, and on the pleura are two lines and two stripes alternately disposed, the stripes (posterior) lemon-yellow; abdomen of a lighter yellowish-brown than the dorsum of the thorax, the basal streaks lemon-yellow, and the edges black.

Antecubitals, 14-15; postcubitals, 8-9. Expanse of wings, 2.4 inches; pterostigma, .13 inches. 1 teneral \( \varphi \).

#### Libellula vinosa nov. sp.

Front reddish-brown, paler in the middle (the labrum sometimes edged with black), or dull olivaceous-yellow (in life deep blood-red); dorsum of thorax fuscous (in life olivaceous-red) obscurely banded before the humerus with dull yellowish (in life only a lighter tint of the basal color) or with a median line and two narrow (the anterior sometimes broad) humeral stripes, bent abruptly, without widening, at the humerus, and just failing to reach the middle line, yellow; pleura fuscous, sometimes with slight steel-blue reflections (in life dark olivaceousbrown with dark greenish reflections) with four yellow or ochraceous stripes (in life blood-red\*); the anterior irregular, indistinct close to the humeral stripe; the second in the middle, broad and straight, the fourth as broad as the second, bordering the hinder edge of the pleura, the third between them insignificant and irregular; wings hyaline with vinous veins, subinfuscated at tip, the anterior pair flavescent from the base to about one-third the distance to the triangle; posterior pair fusco-flavescent at the base as far as the triangle, with two blackish streaks in the spot, between the second and third and the fourth and fifth principal veins, which are also indistinctly seen on the anterior wings; pterostigma nigro- (teneral) or rubro-fuscous; membranule blackish; legs black, base of femora, inside of fore and sometimes middle femora luteous; abdomen reddish-brown (in life bloodred or yellowish-brown, teneral); the incisures, segments 1-4 and 8-9

<sup>\*</sup> This deep and brilliant color in this and other parts is mentioned in my notes only with reference to the darker colored and banded individuals; I can hardly believe that those which have the bands distinctly and rather fresh yellow at present, could have had them blood-red during life; it does not appear to have any teneral signification.

and sometimes those between with a lateral stripe, black; appendages reddish-brown (3), or yellowish-brown (teneral 3), tipped with black (3), or fuscous (teneral 3); or basal half yellowish-brown, apical half black (teneral 3); antecubitals, 15-17; postcubitals, 9-11; three rows of discoidal areolets.

Length, 1.42 inches; alar expanse, 2.24-2.48 inches; pterostigma, .10 inch. Adult  $\delta$ , 2; teneral ( $\delta$ , 3;  $\Im$  1).

#### Dythemis frontalis (Burm.) Hagen.

Hagen has added very little to the previous descriptions of this species by Burmeister and Selys, and evidently had before him only the specimens of these authors, neither of whom mention the ?, which differs considerably from the ¿, at least in wanting the pruinosity of that sex, and in the size of the expanded terminal abdominal

segments.

2. The face in front is pale brownish-yellow (in life pale greenish-yellow); above and on the vertex, but not on the sides, greenish-chalybeous (in life bronze-black with purplish reflections); labrum black; behind the eyes yellow, broken by transverse fuscous lines; thorax fuscous (in life dark fuscous) with an humeral streak, angulated on the inside at the base of the wings, and three pleural stripes dull yellow (in life lemon-yellow); not only the anterior but also the middle femora pale inside (in life yellow), and not only inside but posteriorly and at the base altogether; wings hyaline, the extreme base of the posterior pair, next the principal veins fulvous; a spot on the anterior half of the apex of the wings, in the middle of which the pterostigma stands, barely tinged with luteous; the membranule mentioned by Selys as fuscous and by Hagen as black, is dark fuscous; the width of the swollen base of the abdomen is to that of the expanded portion. extending from the middle of the sixth segment to the ninth (inclusive) as four to five; abdomen black (so in life), the sides with an upper and lower longitudinal irregular streak of brownish-yellow (in life lemon-yellow) most conspicuous on segments 1-3, only present as a line on the basal half of segments 5-6, as outer and inner spots or streaks on basal half of 7-8, more conspicuous on 8, and wanting on 9: antecubitals 14; postcubitals 10;

Length 1.84 inches; alar expanse 3.20 inches; pterostigma .10 inch. The & differs from the & in the following particulars:—the thorax is bluish pruinose (as in life) with the markings like the & faintly discernible; only the anterior femora pale inside and at the base, though the middle femora have those parts fuscous rather than black; the posterior pair of wings do not have the base so much tinged with fumose, if at all, and the luteous spot at the apex of all the wings

nearly if not quite reaches the posterior edge, but extends no nearer the apex than the middle of the pterostigma, starting from half way between the nodus and pterostigma; the abdomen (in life) has the segments 4-6 black, the others blue pruinose; the pruinosity remains in one specimen before me, in another it is seen only on segments 1-3, and on the others none at all; the abdominal markings of the  $\mathfrak P$  are altogether wanting; the width of the swollen base is to that of the posterior half of segment sixth to the ninth segment as four to six; antecubitals 15-16; postcubitals 9-11.

Length 1.75-1.78 inches; alar expanse 3.04 inches. 3 &, 1 \, 2.

#### Dythemis pleurosticta (Burm.) Hagen.

I consider as belonging to this species six specimens obtained by me, all but one of which are teneral; I could not, however, have considered them identical with Burmeister's L. pleurosticta from Brazil, had not Dr. Hagen compared his types with specimens from Cuba; the expression "thoracis dorso trilineato" would not have been applied to specimens the dorsum of whose thorax was figured with a rather broad humeral streak, very broad and angulated at the humerus, and with the barest possible indication, when any, of a median line; in other respects my specimens agree with the descriptions of Burmeister, Selys and Hagen, except that the membranule should rather be described as whitish-cinereous (those of the teneral stage almost milk-white), that the pleural spots of the thorax are pale bluish-white (in the teneral stage milk-white), and that the apex of the primaries beyond the nodus in the teneral ? is fumose, faintly fenestrated with fuscous.

In the living specimens the vertex of the head is bronze-black with purplish reflections, but next the eyes, as in dried specimens, reddishbrown; the upper part of the face is very pale bluish-white, below dull reddish-brown, passing to the upper part of the labrum, and including the apical half of the labium; the thorax is testaceous marked with black, the spots bluish white (or in teneral specimens milk-white); there is a minute yellowish spot on black ground on the pleura, just above the hind coxæ; abdomen pitchy-black, marked with bluish-white (or in teneral specimens milk-white, a little dull).

Antecubitals 13-15; postcubitals 8-10; alar expanse 2.5-2.64 inches. 1  $\delta$ , 1 teneral  $\delta$ , 4 teneral  $\hat{\varphi}$ .

# Mesothemis Poeyi nov. sp.

Vertex and upper portion of front, except at the sides, chalybeous (in life bronze-black with deep purplish reflections); face and mouth pale yellow (in life pale greenish-yellow); back of the head between the

eyes, and a spot on either side in the middle, vellow; two spots on the middle of the dorsum of prothorax and its posterior lobe yellow; dorsum of thorax as far as the middle of anterior wings reddish-black with purplish reflections (in life dark greenish-brown) striped with bright lemon-yellow (as in life) as follows: - a middle line expanded anteriorly, a straight antehumeral narrow stripe on either side, slightly divarieating anteriorly, thickened posteriorly, bent downwards and blurred anteriorly, a narrow humeral stripe, shaped like a brace, the central angle directed backwards, also the humerus and a minute antehumeral transverse spot yellow; pleura of thorax bright lemon-yellow (as in life) with two approximate central stripes, nearly or quite straight of purplish-black (in life dark greenish-brown); legs black, interior of fore femora luteous; wings hyaline, an indication of fulvescence at the extreme base, especially of posterior pair; pterostigma fuseous; membranule black; abdomen pitchy black (as in life); a broad lateral stripe extending from base of abdomen to middle of fourth segment, an abbreviated lateral stripe on segment 5, the base of segments 5 and 6 narrowly, and a large spot at base of 7 not reaching the lateral edge but extending over more than half of the segment, excised in the middle posteriorly and divided by a median black line, vellow (in life bright lemon-yellow); terminal segment with four indistinct yellow dots; appendages black; genital lobes bent towards and touching one another, broader and truncate at tip, black; anterior branch of genital hamules short, simple, conical, testaceous; posterior branch testaceous, narrowed in the middle, directed strongly backwards, the basal halves divariente, apical halves approximate and touching at tip, which are broad, denticulate and black, at the base interiorly and posteriorly a minute reddish unguiculus directed backwards, their tips divarieate; 10-11 antecubitals; 7-8 postcubitals; three rows of discoidal areolets, then two, then three again.

Length 1.6 inches; alar expanse 2.52 inches; pterostigma .12 inch. 1 3.

### Mesothemis Gundlachii nov. sp.

8. Vertex and front dull green, the upper part of the face a little infuscated (in life grass-green); vertex bi-tuberculated; mouth luteous (in life lemon-yellow); thorax, both dorsum and pleura, dull, slightly olivaceous-green (in life grass-green), the incisures reddish-brown; humerus edged with black; legs black, base of all the femora and the inside of fore femora pale; wingshyaline with black veins; pterostigma luteo-flavescent; membranule black; abdomen black marked with brownish-yellow (in life grass-green); segments 1-3 brownish-yellow with black incisures, the third with a subdorsal band of black on the

apical half of either side, united at the apex; 4 black, broadly brownish-yellow at base, with an abbreviated lateral stripe of brownish-yellow beyond; 5-8 black with a saddle-shaped brownish-yellow spot anteriorly; 9-10 black; upper appendages clear yellow, lower ones tinged with fuscous; abdomen beneath pruinose; genital hamule testaceous, inner branch black, within cylindrical, unguiculated, outer branch laminaterounded, but slightly docked at the tip, extending half way to apex of genital lobe; genital lobe oval, black, hairy; 12-13 antecubitals; 10 postcubitals; three rows of discoidal areolets.

Length 1.66 inches; alar expanse 2.48 inches; pterostigma .125

inch. 1 8.

#### Diplax ochracea (Burm.) Hagen.

9. Vertex and upper part of front fuscous (in life pale reddishbrown with a greenish tinge), or dull luteous (teneral); face yellowishbrown (in life pale green) or pale (teneral); labrum edged with reddishbrown; dorsum of thorax brown mottled with dull yellow (in life dull green), or yellow marked with brown (teneral); pleura of thorax dull greenish-yellow, paler below, the sutures brown with a dark reddishbrown spot at the base of the anterior and middle legs (in life dull green with dark reddish-brown markings), or pale lemon-yellow with fuscous markings (teneral); legs black, fore femora, except the outside, the other femora towards their base, pale luteous; wings hyaline, veins black, subinfuscated at the extreme tip, the base flavescent as far as half way to the triangle or less on the anterior wings, and to the triangle on posterior pair; on one specimen it is almost wanting on the anterior wings and on the posterior wings extends only as far as is usual on the anterior pair; pterostigma fuscous, the bordering nervures very black, in teneral stage paler; membranule black; abdominal segments 1-3 testaceous bordered posteriorly with fuscous (in life dull greenishyellow bordered with very dark brown), or pale lemon-yellow bordered with brownish-fuscous (teneral); remaining segments blackish brown, each side of segments 4-7 with a broad brownish-yellow band directed backwards and upwards, nearly meeting one another posteriorly (colors of the living specimens like the base of the abdomen), or in teneral stage the same, with the colors pale yellow and brownishblack; terminal segment and appendages fuscous or pale yellowish (teneral); 10-11 antecubitals; 7-8 postcubitals; three rows of discoidal areolets, then two, then three again.

Length 1.30-1.34 inches; alar expanse 2.20-2.26 inches; pterostigma .13 inch.  $4 \ 9$ , 3 teneral 9.

The posterior lobe of the prothorax is large and quadrangular, hardly bifid.

197 Scudder

Hagen in his synopsis gives "Libellula justiniana Selys" as a synonym, evidently through inadvertence, "Libellula justina Selys" being intended, as is evident from the description, as well as from his giving "Libellula justiniana Selys" as a synonym to his Diplax justiniana immediately below; in one the vulvar lamina is erect, in the other suberect.

## Diplax justiniana (Selys) Hagen.

I have specimens which agree altogether with Hagen's careful description of this species, with the following exceptions: The appendages of the adult  $\delta$  are brownish-black, being rufo-fuscous, as described by Selys, in the teneral stage; the pterostigma is pale fuscous in both stages and sexes, instead of yellow as described by both Selys and Hagen; the membranule is nigro-cinereous, edged with black, in the adult  $\delta$ .

The colors of the living specimens are as follows: — Vertex of head and upper part of face bronze-black with purplish reflections (adult  $\delta$ ) or dusky greenish-yellow (teneral  $\delta$ ) or lemon-yellow (teneral  $\gamma$ ); middle of face very dark brown (adult  $\delta$ ), or dusky greenish-yellow (teneral  $\delta$ ), or lemon-yellow (teneral  $\gamma$ ); labrum reddish-brown (adult  $\delta$ ), or testaceous (teneral  $\delta$ ) or lemon-yellow (teneral  $\gamma$ ); dorsum of thorax velvety-black (adult  $\delta$ ) or reddish-brown, pale along the middle (teneral  $\delta$ ) or yellowish-brown with a lemon-yellow median band (teneral  $\gamma$ ); pleura of thorax dark dull olivaceous-green (adult  $\delta$ ), or dark dull green (teneral  $\delta$ ) or lemon-yellow (teneral  $\gamma$ ); abdomen black pruinose, some of the terminal segments — the particular ones not noted at the time of description, and not indicated on the dried specimens — very dark bronze-green (adult  $\delta$ ), or black pruinose, marked with reddish-brown mixed with black (teneral  $\delta$ ), or yellowish brown marked with black (teneral  $\delta$ ).

Antecubitals 8-9; postcubitals 6-7; length 1.04-1.16 inches; alar expanse 1.64-1.88 inches.

1 adult 8, 2 teneral 8, 1 teneral 9.

### Diplax abjecta (Ramb.) Hagen.

To this species must, I suppose, be referred four male specimens which I captured in the Isle of Pines, although the basal spot of the wings is altogether absent, the pterostigma is almost fuscous and measures scarcely more than three millimetres in specimens whose expanse of wing is 56 millimetres; the base of the legs are reddish-brown.

In life the vertex and front above are bright steel-blue; the face below pitchy-black; the dorsum of the thorax velvety-black; the

pleura very dark olivaceous-brown, above the base of femora reddishbrown; abdominal segments 1-3 very dark reddish-brown mixed with black, segments 4-6 and all of 7 except apex, black pruinose, the remainder velvety-black with occasional reflections of a very dark bluish tinge; 10-11 antecubitals; 7-9 postcubitals.

4 8.

# Perithemis Domitia (Drury) Hagen.

In living specimens the lighter colors of the face are olive-green, the darker reddish-brown with an olivaceous tint; the thorax is maroon-brown with an olivaceous tint, the markings—the dorsal and two pleural stripes—of olivaceous-green; the abdomen above is yellow-ish-brown, the markings—a divided median longitudinal stripe—of ochraceous yellow; beneath it is pale olivaceous-green; the pterostigma brilliant red.

Antecubitals 7; postcubitals 4-5; length .84 inch; alar expanse 1.48 inches.

2 8.

The following announcement was made by the Publishing Committee:—

Written communications presented to the Society for publication shall be under the entire control of the Publishing Committee, who shall decide from their length and character whether they shall appear in the "Memoirs" or "Proceedings"; they may make any alterations in the MS. which they may deem advisable to prepare it for the press, retaining, however, the essential meaning of the author; and shall make or cause to be made for publication in the "Proceedings" an abstract of every paper appearing in the "Memoirs." In the "Proceedings" every paper or abstract shall be published in connection with the doings of the meeting at which it was presented; but the Publishing Committee shall decide upon the consecutive arrangement of those inserted in the "Memoirs," assuming editorial privileges in this respect, in order to secure uniformity of size, variety of matter and a fair proportion of illustrations in the different numbers.

Any article requiring or improved by plates will be illustrated, provided drawings are furnished by the author; but no portion of any paper will be placed in the hands of the printer until the whole of the MS. and the accompanying drawings are in the possession of the Publishing Committee.

As soon as a paper is published in the "Memoirs," a number of